

# Heteroptera (Hemiptera: Prosorrhyncha) new to Canada. Part 1

G.G.E. SCUDDER

DEPARTMENT OF ZOOLOGY, UNIVERSITY OF BRITISH COLUMBIA,  
VANCOUVER, BC V6T 1Z4

## ABSTRACT

The occurrence of 34 species of true bugs newly recognized in Canada is documented.

## INTRODUCTION

In preparing the recently published checklist of the Hemiptera of Canada and Alaska (Maw *et al.* 2000), various collections across Canada were examined to document the distribution of the species. In the process, 34 species new to Canada were identified. The locality and collection records for these new discoveries are published herein, so as to validate the inclusion of the species in the above mentioned checklist. Additional species will be published in Part 2 when all determinations have been confirmed. The records of new Miridae to Canada are being published elsewhere (Schwartz and Scudder 2000).

The arrangement in the list below is according to the checklist (Maw *et al.* 2000), and in general follows the catalogue by Henry and Froeschner (1988). The latter publication provides references to the descriptions of the various species and associated literature. References to keys for identification are included in Henry and Froeschner (1988) and Maw *et al.* (2000). Where data label uses common name of host, the scientific name has been added in parentheses.

Museum abbreviations used in the text are as follows (curators in parentheses):

- APM: Alberta Provincial Museum, Edmonton, AB (A.T. Finnermore).  
 CNC: Canadian Collection of Insects, Agriculture and Agri-Food, Ottawa, ON (R.G. Footitt).  
 LEMQ: Lyman Entomological Museum, McGill University, Macdonald College Campus, St.-Ann-de-Bellevue, QC (T.A. Wheeler).  
 RBCM: Royal British Columbia Museum, Victoria, BC (R.A. Cannings).  
 ROM: Royal Ontario Museum, Toronto, ON (D. Currie).  
 UBC: Spencer Entomological Museum, Department of Zoology, University of British Columbia, Vancouver, BC (K.M. Needham).  
 UG: Department of Environmental Biology, University of Guelph, Guelph, ON (S.A. Marshall).

## SPECIES NEW TO CANADA

Infraorder NEPOMORPHA

Family CORIXIDAE

*Ramphocorixa acuminata* (Uhler)

ON: 2♂ 1♀, Essex Co., South Gosfield Tp., Wigle Creek Sta. 2, 42°03.3'N 82°46.5'W, MNR Lot No. 8282-028, 2.xi.1982 (J. Blackburn; H. Tardif) [ROM].

*Trichocorixa kanza* Sailer

ON: 1♂, Greeley, gravel pit, 2.xi.1983 (D.J. Larson) [CNC].

*Trichocorixa louisianae* Jaczewski

NS: 1♀, Sable Is., 8.vi.1966 (W.R.M. Mason) [CNC]; 3♀, Sable Is., West end, 1.vii.1967 (H.F. Howden) [CNC]; 47♂ 40♀, Sable Is., 11-15.ix.1967 (J.E.H. Martin) [CNC].

*Trichocorixa verticalis verticalis* (Fieber)

PE: 1♂ 1♀, Queens Co., Mount Steward, 21.viii.1971 [CNC].

## Infraorder GERROMORPHA

## Family HEBRIDAE

*Hebrus buenoi* Drake & Harris

ON: 1♂, Arkell, 20.iv.1976 (W.J. Moolenbeck) [UG]; 2♂, Damascus, 2.vi.1976 (S.A. Marshall) [UG]; 1♂, Guelph, 23.v.1977 (Kevin Barber) [UG]; 1♀, Guelph, 18.vii.1977 (W.A. Attwater) [UG]; 1♂, *id.*, 21.vii.1977 [UG].

*Merragata brunnea* Drake

ON: 1♀, Arkell, pond #2 (B.S. Heming) [UG]; 1♀, Guelph, 22.ix.1983 (Nancy R. Ennis) [UG]; 1♂, Guelph, 22.ix.1983 (Edward Hippert) [UG]; 1♂, Walpole I., 11.vii.1977 (E.A. Inns) [UG].

## Family VELIIDAE

*Microvelia hinei* Drake

NS: 2♂, 7♀, Falmouth, pond #1, pH 6.1, 20.v.1984 (G.G.E. Scudder) [CNC, UBC].

ON: 1♀, Walpole I., 27.vi.1985 (G.G.E. Scudder) [CNC].

This Ontario record was included in a tabulation in Scudder (1987), but without a locality record.

*Steinovelia stagnalis* (Burmeister)

ON: 1♀, Rondeau Pr. Pk., Marsh Trail, treading *Typha* in marsh, 2.vi.1985 (A. Davies, J.M. Campbell) [CNC].

## Infraorder LEPTOPODOMORPHA

## Family SALDIDAE

*Chiloxanthus arcticus* (Sahlberg)

NT: 1♂ 1♀, Richards Is., Kidluit Bay, 30.viii.1948 (W.J. Brown) [CNC].

*Saldula balli* Drake

BC: 1♀, Vernon, vii.1920 (N.L. Cutler) [UBC].

## Infraorder CIMICOMORPHA

## Family TINGIDAE

*Corythucha bellula* Gibson

MB: 7♂ 7♀, Aweme, *Ribes*, 19.v.1919 (N. Criddle) [CNC]; 1♀, Aweme, *Corylus*, 30.v.1919 (N. Criddle) [CNC]; 4♂ 1♀, Aweme, *Alnus incarna*, 13.viii.1930 (R.M. White) [CNC]; 1♀, Darlington, swept from saskatoons (*Amelanchier* sp.), 24.v.1930 (R.M. White) [CNC]; 2♂, Lake Audy, alder (*Alnus* sp.), 1.vi.1941 (R.D. Bird) [CNC].

ON: 4♀, Bothwell, 29.v.1929 (G.S. Walley) [CNC]; 7♂ 12♀, Hagersville, on *Crataegus*, 9.vii.1962 (Kelton & Thorpe) [CNC].

*Corythucha obliqua* Osborn & Drake

BC: 3♂ 4♀, Summerland, *Ceanothus*, 7.vii.1975 (L.A. Kelton) [CNC].

*Gargaphia angulata* Heidemann

ON: 1♀, Belle River, 7.vi.1961 (Kelton & Brumpton) [CNC]; 12♂ 15♀, Grand Bend, 7.ix.1961 (L.A. Kelton) [CNC]; 4♂ 5♀, Grand Bend, 15.vi.1962 (Kelton & Thorpe) [CNC]; 1♂ 1♀, Pinery Pt. Pk., 8.ix.1961 (J. Brumpton) [CNC].

*Hesperotingis antennata* Parshley

BC: 2♂, Cranbrook, Ponderosa pine (*Pinus ponderosa*), 23.vii.1959 (L.A. Kelton) [CNC].

MB: 1♀, Aweme, 25.viii.1922 (R.M. White) [CNC].

SK: 1♀, Cypress Hills, S. Maple Cr. (117), 20.vii.1956 (Lindroth) [CNC]; 2♂, Saskatoon, 4.viii.1925 (Kenneth M. King) [CNC].

*Hesperotingis fuscata* Parshley

AB: 1♂ 1♀, Brocket, 18 km NNW, 49°41'N 113°54'W, 1350m., pantrap, 18-22.vii.1998 (K. White) [CNC]; 4♂ 1♀, *id.*, pitfall trap [CNC; Scudder Coll; White Coll.]; 2♂ 1♀, *id.*, 6-10.viii.1998 [CNC]; 2♂ 1♀, *id.*, 10-14.viii.1998 [CNC]; 1♂, *id.*, 14-18.viii.1998 [CNC]; 1♂ 1♀, CFB Suffield, NWA, 50°37.678'N 110°18.371'W, pan trap, 16-28.vii.1994 (A.T. Finnamore) [APM]; 1♂ 1♀, *id.*, 16-29.vii.1994 [APM]; 1♂ 1♀, *id.*, 16-28.vii.1994 [APM]; 1♂ 2♀, *id.*, 50°23.466'N 110°36.768'W, 16-28.vii.1994 [APM].

BC: 1♂, Fairview, White L., BGxh1, SWm, pan trap P-2, 20.vi-27.vi.1995 (J. Jarrett) [UBC]; 2♂, *id.*, pan trap P-9, 27.vi-4.vii.1995 [UBC]; 1♀, Kilpoola L., PPxh1, pitfall trap KL3-4, 15.vii-6.viii.1996 (J. Jarrett & G.G.E. Scudder) [UBC]; 1♂, *id.*, pitfall trap KL3-5 [UBC]; 1♂, *id.*, pitfall trap KL1-5, 23.vi-28.vii.1997 (J. Jarrett) [UBC].

*Hesperotingis occidentalis* Drake

AB: 2♀, Kananaskis, 20.vii.1974 (L.A. Kelton) [CNC]; 1♂, Lundbreck, 7.vii.1970 (L.A. Kelton) [CNC].

BC: 2♀, Fernie, 1.vii.1934 (Hugh B. Leech) [CNC].

*Leptopharsa heidemanni* (Osborne & Drake)

ON: 5♂ 12♀, Ojibway, 6-7.vi.1961 (Kelton & Brumpton) [CNC].

## Family REDUVIIDAE

*Emesaya brevipennis brevipennis* (Say)

ON: 1(?), Chatham, 24.ix.1927 (C.W. Smith) [CNC]; 1♂, Essex Co., 10.ix.1955 (W. Kendrick) [UG]; 1♀, Freulton, Malaise, 28.viii.1984 (M.T. Kasserra) [UG]; 1♂, Harrow, 10.ix.1950 (A.H. Kichi) [UG]; 1♂, London, 1958 [CNC]; 1♀ 2 immature, Pt. Pelee, 28.vii.1920 (N.K. Bigelow) [CNC]; 1♀, Pt. Pelee, 16.ix.1932 (G.M. Stirrett) [CNC]; 2♂, Pt. Pelee, 8.ix.1954 (R. Lambert) [CNC]; 1♀, Pt. Pelee, 9.ix.1954 (C.D. Miller) [CNC]; 2♀, Pt. Pelee, 13.ix.1961 (G. Brumpton) [CNC]; 1(?), Sarnia, 5.x.1907 (W.A. Dent) [CNC]; 1♀, *id.*, 14.xi.1913 [CNC]; 1♂ 1♀, *id.*, x.1914 [CNC]; 2♂, S. School, 1937 (E.A. Watts, M. Fletcher) [UG]; 1♂ 1♀, St. Thomas, x.1920 (H.G. Crawford) [CNC]; 1♂, Windsor, Malaise, 24.vii.1984 (M.T. Kasserra) [UG]; 1♀, Yarmouth, 1946 [CNC].

*Empicoris culiciformis* (DeGeer)

BC: 1♀, Chilliwack, 1.vi.1924 [RBCM]; 6♂ 3♀, Victoria, 24.v.1921 (W. Downes) [CNC].

ON: 1 ♀, Chatham, 29.vi.1928 (G.J. Spencer) [CNC]; 1 ♂ 1 ♀, Don Mills, in home with pinned insects infested with carpet beetles, x.1959 (G.B. Wiggins) [ROM]; 1 ♀, Toronto, 12.viii.1964 (B. Pulley) [ROM].

*Empicoris parshleyi* (Bergroth)

QC: 4 ♂ 5 ♀, Brome, under bark on maple (*Acer* sp.), 9.vi.1936 (G.S. Walley) [CNC]; 1 ♀, Covey Hill, 8.vii.1937 (G.S. Walley) [CNC]; 1 ♂, Rigaud, 25.vi.1906 (Beaulieu) [CNC].

Infraorder PENTATOMOMORPHA

Family ARADIDAE

*Aradus basalis* Parshley

'NB: 1 ♀, Bathurst, vi.1930 (J.N. Knull) [CNC].

QC: 1 ♀, Mt. Jacques Cartier, 5.vii.1954 (W.J. Brown) [CNC].

Family COREIDAE

*Acanthocephala terminalis* (Dallas)

ON: 1 ♂, Kent Co., 28.viii.1955 (G. McDonald) [UG]; 1 ♂, Kent Co., Forest at Hwy. 401, 12.x.1997 (S.A. Marshall) [UG]; 1 ♂, Lambton Co., North Lambton, 30.vii.1996 (J. Skevington) [UG]; 1 ♀, Lambton Co., Pinery Prov. Pk., 21.vii.1992 (J. Carmichel) [UG]; 1 ♂ 5 ♀, Leamington, 29.v.1937 (G.S. Walley) [CNC]; 3 ♀, *id.*, 31.v.1937 [CNC]; 3 ♀, *id.*, 1.vi.1937 [CNC]; 1 ♂, *id.*, 9.vi.1937 [CNC]; 1 ♀, *id.*, 11.vi.1937 [CNC]; 1 ♀, Simcoe, 6.vi.1939 (G.E. Shewell) [CNC]; 1 ♀, Simcoe, 24.vi.1939 (T.N. Freeman) [CNC].

*Catorhintha mendica* Stål

MB: 1 ♀, Aweme, 11.vi.1922 (R.M. White) [CNC].

ON: 1 ♂, St. Catharines, goldenrod (*Solidago* sp.), 13.ix.1964 [ROM].

Family RHOPALIDAE

*Arhyssus crassus* Harris

BC: 1 ♂, Osoyoos, 26.viii.1986 (G.G.E. Scudder) [UBC]; 1 ♂ 2 ♀, Osoyoos, Mt. Kobau, 1525m., 26.viii.1986 (G.G.E. Scudder) [UBC]; 1 ♂, Osoyoos, Mt. Kobau Rd., km 6.7, on flowers of *Holodiscus discolor*, 10.vii.1994 (G.G.E. Scudder) [UBC]; 1 ♀, Osoyoos, Mt. Kobau Rd., km 1.8, PPxh1, WAw, pitfall trap, 23.vi-28.vii.1997 (J. Jarrett) [UBC].

*Aufeius impressicollis* Stål

BC: 1 ♂, Osoyoos IR, nr. Mud L., 49°13'N 119°31'W, *Purshia* assoc., BGxh1, AN, pitfall trap, 4.x.1994-10.iv.1995 (G.G.E. Scudder) [UBC].

Family ARTHENIDAE

*Chilacis typhae* (Perris)

BC: 2 ♀, Osoyoos, 7.7 km N, jct. Hwy. 97/Rd. 22, 49°05'23"N 119°32'49"W, on *Typha latifolia*, 8.x.1999 (G.G.E. Scudder) [UBC]; 7 ♂ 10 ♀, *id.*, 16.x.1999 [UBC]; 40 ♂ 38 ♀, Osoyoos, 8 km N, 49°05'32"N 119°32'18"W, on *Typha latifolia*, 16.x.1999 (G.G.E. Scudder) [CNC, RBCM, UBC].

ON: 1 ♂, Nepean, Piney Forest, Lafontaine House, ex MV lite, 18.vii.1991 (M.D. Schwartz) [CNC]; 2 ♂, *id.*, 27.vii.1991 [CNC].

## Family LYGAEIDAE

*Kleidocerys modestus* Barber

BC: 4♂ 1♀, Vernon, BX Range, 610m [2000'], 4.vii.1979 (R.A. Cannings) [UBC].

## Family CYDNIDAE

*Macroporus repetitus* Uhler

BC: 2♂ 1♀, Vaseux Cr., 'CWS Bench', 49°16'N 119°30'W, *Purshia* assoc., BGxh1, AN, pitfall trap, 9.v-3.vi.1994 (G.G.E. Scudder) [UBC]; 2♂ 3♀, *id.*, 3.vi-8.vii.1994 [UBC]; 2♂, *id.*, 8.vi-5.vii.1995 [UBC].

*Melanaethus robustus* Uhler

ON: 1♀, Pelee I., Fish Point, 28.vi.1985 (G.G.E. Scudder) [CNC].

*Microporus obliquus* Uhler

AB: 3♂, CFB Suffield, NWA, 50°37.678'N 110°18.371'W, 16.vi.1995 (A.T. Finnamore) [APM]; 1♂ 2♀, *id.*, 16-28.vii.1994 [APM]; 1♂ 2♀, *id.*, 16-29.vi.1994 [APM]; 1♂, *id.*, 28.vii-16.viii.1994 [APM]; 2♂ 1♀, *id.*, 16.viii-7.ix.1994 [APM].

BC: 2♀, Oliver, IRI, 'Watertower', 49°10'N 119°31'W, *Purshia* assoc., BGxh1, AN, pitfall trap, 3.v-7.vi.1995 (G.G.E. Scudder) [UBC]; 1♀, Osoyoos, Haynes Ecol. Res., BGxh1, AN recovery after fire, pitfall trap, 9.vii-7.viii.1994 (G.G.E. Scudder) [UBC]; 1♂, *id.*, 9.viii-3.ix.1995 [UBC]; 1♂ 2♀, *id.*, 14.v-9.vi.1996 [UBC]; 1♀, *id.*, 9.vi-9.vii.1996 [UBC]; 2♂ 1♀, *id.*, 9.viii-20.ix.1996 [UBC]; 1♀, *id.*, 19.vi-18.vii.1997 [UBC]; 2♀, *id.*, 12.v-28.vi.1998 [UBC].

## Family PENTATOMIDAE

*Murgantia histrionica* (Hahn)

ON: 4♂ 5♀, Southampton, on *Brassica*, 15.ix.1956 (P.N. Vroom) [CNC].

## Family SCUTELLERIDAE

*Euptychodera corrugata* (Van Duzee)

AB: 1♀, Manyberries, 19 km S, jct. 501-502, 13.viii.1982 (S.G. & R.A. Cannings) [UBC].

## Family THYREOCORIDAE

*Corimelaena alpina* (McAtee & Malloch)

NB: 1♀, Fredericton, French Lake, 12.vi.1931 (C.W. Maxwell) [LEMQ].

QC: 1♀, Laval, 7.viii.1938 [LEMQ].

*Corimelaena obscura* McPherson & Sailer

ON: 2♂, Kingsville, 8.vii.1977 (A.A. Konecny) [UG].

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## REFERENCES

- Henry, T.J. and R.C. Froeschner (Eds.). 1988. Catalog of the Heteroptera, or True Bugs, of Canada and the Continental United States. E.J. Brill, Leiden.
- Maw, H.E.L., R.G. Foottit, K.G.A. Hamilton and G.G.E. Scudder. 2000. Checklist of Hemiptera of Canada and Alaska. NRC Research Press, Ottawa.
- Schwartz, M.D. and G.G.E. Scudder. 2000. Miridae (Heteroptera) new to Canada, with some taxonomic changes. *Journal of the New York Entomological Society* (in press).
- Scudder, G.G.E. 1987. Aquatic and semiaquatic Hemiptera of peatlands and marshes in Canada. *Memoirs of the Entomological Society of Canada* 140: 65-98.